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ABSTRACT

This book contains science projects about seed plants that deal with plant physiology, plant ecology, and plant agriculture. Each of the projects includes a step-by-step experiment followed by suggestions for further investigations. Chapters include: (1) "Bean Seed Imbibition"; (2) "Germination Percentages of Different Types of Seeds"; (3) "Cotyledon Removal and Seedling Growth"; (4) "Determining the Best Sowing Depth"; (5) "Carbon Dioxide Production and Oxygen Consumption by Germinating Seeds"; (6) "Stomatal Density of Different Leaves"; (7) "Environmental Factors Affecting Transpiration"; (8) "Leaching from Potted Plants"; (9) "Acid Rain Injury to Plants"; (10) "Photosynthesis in Leaf Disks"; (11) "Starch Testing of Leaves"; (12) "Plant Carbon Dioxide Deficiency"; (13) "C-3, C-4, and CAM Photosynthesis"; (14) "Plant Growth in Various Potting Soils"; (15) "Fertilizer Cost and Plant Growth"; (16) "Soil pH and Plant Growth"; (17) "Plant Growth with Controlled-Release and Soluble Fertilizers"; (18) "Nutrient Solution Aeration and Plant Growth"; (19) "Plant Growth in Various Nutrient Solutions"; (20) "Plant Mineral Nutrient Deficiency Symptoms"; and (21) "Plant Changes in the Nutrient Solution pH." Appendices contain topics on plastic soda bottles, fluorescent light systems, hydroponic equipment and nutrient solutions, seedlings and rooted cuttings for hydroponics, suppliers, and projects to avoid. (JRH)

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